



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.		
10/718,390	11/20/2003	Ronald F. Palermo	10670013010202	9732		
37211	7590	01/15/2008	EXAMINER			
BASCH & NICKERSON LLP 1777 PENFIELD ROAD PENFIELD, NY 14526		WOLLSCHLAGER, JEFFREY MICHAEL				
ART UNIT		PAPER NUMBER				
1791						
NOTIFICATION DATE		DELIVERY MODE				
01/15/2008		ELECTRONIC				

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

dneels@bnpatentlaw.com
dmasters@bnpatentlaw.com
mnickerson@bnpatentlaw.com

Office Action Summary	Application No.	Applicant(s)
	10/718,390	PALERMO ET AL.
	Examiner	Art Unit
	Jeff Wollschlager	1791

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 19 October 2007.
- 2a) This action is **FINAL**. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-13 and 20 is/are pending in the application.
 - 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-13 and 20 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/ are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) Notice of Informal Patent Application
- 6) Other: _____.

DETAILED ACTION

Response to Amendment

Applicant's amendment to the claims filed October 19, 2007 has been entered. Claims 1, 11 and 20 are currently amended. Claims 1-13 and 20 are under examination.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-13 and 20 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claims 1 and 20 recite the decorative aggregate is "a non-cementitious decorative aggregate". There does not appear to be adequate support in the instant disclosure for this limitation in the claims. The specification provides support for various types of decorative aggregates, but does not appear to provide support to exclude cementitious based decorative aggregates. Further, claim 20 recites substantially similar process steps to those found in claim 1, but employs the transitional phrase "consisting of". There does not appear to be adequate support in the instant disclosure for this limitation in the claim. The specification provides support for the comprising language employed in claim 1, but does not appear to provide support to exclude other steps utilized in connection with the claimed process steps to produce the claimed monolithic floor.

Regarding claim 11, the recitation “about 200 grit...diamond pad” (emphasis added) is not supported by the original disclosure. The limitation “200 grit...diamond pad” does have support in the original disclosure.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-5, 7-10 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shaw et al. (U.S. Patent 6,033,146) in view of Danielsson (U.S. Patent 4,281,496) or Harvey (US 6,568,146).

Regarding claims 1 and 20, Shaw et al. teach a method for forming a decorative concrete material containing integrated aggregate with the following steps: preparing and forming the region upon which the monolithic concrete floor is to be poured (col. 3, lines 31-33); contiguously pouring concrete throughout the formed region (col. 3 lines 42-45); striking off and

floating the concrete to effectively densify the concrete (col. 3, lines 53-55 and 57-60); implicitly allowing the concrete to cure to a semi-stiff state because the concrete is intrinsically semi-stiff as evidenced by col. 4, lines 14-16 and due to the fact that time has passed since the completion of the floating step. Next, to the finished, generally planar surface, a quantity of decorative aggregate is disbursed over the semi-stiff concrete surface (col. 3, line 65 – col. 4, line 5) and is then integrated into the upper surface of the semi-stiff concrete (col. 4, line 17-19). The concrete with the integrated aggregate is then partially cured (col. 4, lines 27-30), and the surface is washed and brushed such that no more than five percent of the particulates are removed (col. 4, lines 36-50). The concrete is then fully cured and washed and undergoes additional grinding and is polished (col. 4, lines 55-65) to provide a generally planar and smooth monolithic concrete floor.

Shaw et al. do not perform a traditional grinding step until after the floor has fully cured. However, Danielsson teaches an analogous method for forming a concrete floor where the grinding is performed after the floor is hardened/partially cured, but prior to the floor being fully cured to produce a floor comprising uniformly exposed aggregate over the top of the concrete (Abstract; col. 1, lines 56-64; col. 2, lines 17-22; col. 3, lines 46-52; col. 6, lines 47-52; col. 7, line 64 – col. 8, lines 11-19). Alternatively, Harvey teaches an analogous method of manufacturing a decorative cementitious floor wherein the floor containing decorative aggregate is partially cured for 12 to 48 hours and then ground to a smooth finish (col. 3, lines 36-67).

Therefore it would have been *prima facie* obvious to one having ordinary skill in the art at the time of the claimed invention to have performed the grinding step disclosed by Shaw et al. before the floor was fully cured for the purpose as taught by Danielsson, of improving the efficiency of the grinding step (col. 8, lines 11-19) or for the purpose as suggested by Harvey of

grinding a floor containing aggregate to produce a smooth finish in an art recognized equivalent manner (col. 3, lines 58-68).

As to claim 2, Shaw et al. teach the aggregate particulate is approximately 3/8", which is approximately 9 mm (col. 4, line 5).

As to claims 3-5, Shaw et al. teach the aggregate comprises naturally occurring materials such as seashells and various metals as well as man-made materials such as glass and composite materials (col. 4, lines 1-5).

As to claim 7, Shaw et al. teach the concrete may be colored (col. 3, line 50).

As to claims 8-10, Shaw et al. teach that the top surface may be treated with a hydrolyzed alkali silica solution sealer after the floor is completed which results in the formation of an insoluble silicate structure on the surface of the concrete (col. 4, line 65 – col. 5, line 15).

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shaw et al. (U.S. Patent 6,033,146) in view of Danielsson (U.S. Patent 4,281,496) or Harvey (US 6,568,146), as applied to claims 1-5, 7-10 and 20 above, and further in view of Darrow et al. (US 6,780,369).

As to claim 6, Shaw et al. do not explicitly state that the semi-stiff state is determined by a one-quarter inch depression resulting from an applied normal force of between about 4 and 5 pounds per square inch. However, Shaw et al. teach a semi-stiff state of the concrete such that the particulate is prevented from impressing into the surface of the concrete before it is so desired (col. 4, lines 14-16). Whereas Shaw et al. employ the same claimed material in the same claimed way under the same claimed process conditions it follows that the semi-stiff state disclosed by Shaw et al. is the same as the semi-stiff state recited in the claim. It is further noted that the claim does not appear to define a manipulative step.

Additionally, Darrow et al. disclose that it is conventional in the art to allow the concrete to reach a certain level of firmness/stiffness prior to finishing (col. 8, lines 23-62) and that prior to "further floating operations" a test of having a finisher step on the floor should result in a depression of $\frac{1}{4}$ " to $\frac{3}{8}$ " (col. 10, lines 11-26).

Therefore it would have been *prima facie* obvious to one having ordinary skill in the art at the time of the claimed invention to have combined the teaching of Shaw with Darrow et al. and to have monitored and controlled the level of firmness of the concrete prior to further finishing steps for the purpose of effectively finishing the concrete floor, as is routinely practiced in the art.

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shaw et al. (U.S. Patent 6,033,146) in view of Danielsson (U.S. Patent 4,281,496) or Harvey (US 6,568,146), as applied to claims 1-5, 7-10 and 20 above, and further in view of Surface Preparation (IDS document, 2001).

As to claim 11, the combination teaches the method of claim 1 as set forth above. Further, Harvey teaches a progressive grinding process to yield a fine surface using between 100 to 3,000 grit sanding wheels (col. 3, lines 62-67). The combination does not disclose the specific diamond heads/pads as claimed.

However, the Surface Preparation document illustrates the employment of diamond disks for grinding concrete (page 3 and 6 of the document). Further, it is noted that one having ordinary skill would have selected and optimized the grit and types of diamond/sandpaper depending on the type of aggregate used, the degree of concrete cure, and the required degree of surface smoothness and shine.

Therefore it would have been *prima facie* obvious to one having ordinary skill in the art at the time of the claimed invention to have employed conventional grinding means to

progressively grind the surface of the concrete to produce a desired surface smoothness. The combination suggests the specific selection of the means would have been readily optimized by the artisan.

Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shaw et al. (U.S. Patent 6,033,146) in view of Danielsson (U.S. Patent 4,281,496) or Harvey (US 6,568,146) and further in view of Surface Preparation (IDS document, 2001), as applied to claim 11 above, and still further in view of Jones (U.S. Patent 6,454,632).

As to claim 12, the combination teaches method of claim 11 as set forth above. Shaw et al. do not teach all the limitations of claim 12. However, Jones et al. teach applying a surface treatment to the polished upper surface, where the surface treatment is a chemical reactive concrete stabilizer providing a densified upper surface (Abstract; col. 2, lines 50 – col. 3, line 25).

Therefore it would have been *prima facie* obvious to one having ordinary skill in the art at the time of the claimed invention to have employed the surface treatment disclosed by Jones et al. in the method taught by Shaw for the purpose, as taught by Jones et al. of hardening/densifying and polishing a concrete surface (Abstract).

Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shaw et al. (U.S. Patent 6,033,146) in view of Danielsson (U.S. Patent 4,281,496) or Harvey (US 6,568,146), as applied to claims 1-5, 7-10 and 20 above, and further in view of Chiuminatta et al (5,086,750)

As to claim 13, the combination teaches the method of claim 1 as set forth above. Shaw et al. is silent about the conventional practice of scoring the semi-cured floor to facilitate stress

relief. However, Chiuminatta et al. provide explicit teaching where a diamond saw is employed to score a semi-cured concrete floor (Abstract; col. 1, lines 49-63; col. 3, lines 8-15; col. 5, lines 36-38).

Therefore it would have been *prima facie* obvious to employ the scoring technique disclosed by Chiuminatta et al. while practicing the method of Shaw et al. for the purpose of facilitating uniform stress relief such that the provided expansion or contraction joints prevent the concrete from cracking undesirably

Response to Arguments

Applicant's arguments filed October 19, 2007 regarding the 35 USC 112, first paragraph rejection have been fully considered, but they are not persuasive.

Applicant argues, regarding the limitation, "non-cementitious", found in claims 1 and 20, that various examples of decorative aggregates – none of which include a binding agent such as Portland cement are disclosed, thereby establishing Applicant's possession of the claimed invention. This argument is not persuasive. The examiner notes that the claim now includes any decorative aggregate except cementitious aggregate. The negative limitation excluding cementitious aggregates is not supported by the original disclosure. While the examiner acknowledges that there is no *in haec verba* requirement, there is the requirement that the limitation either be expressly, implicitly or inherently disclosed. The description of various objects not containing cement does not imply that the common "non-cementitious" characteristic of these items is what the applicant was in possession of at the time of the claimed invention. The term "non-cementitious" is not synonymous with the decorative aggregates disclosed (MPEP 2163.05). The aggregates, also, for example, do not contain wood, so a limitation "non-woody" would also appear to have as much support as the limitation

“non-cementitious”. Further, as set forth in MPEP 2163.05 II: “Whatever may be the viability of an inductive-deductive approach to arriving at a claimed subgenus, it cannot be said that such a subgenus is necessarily described by a genus encompassing it and a species upon which it reads.” For all of these reasons, the examiner concludes the rejection is proper.

Applicant then argues that the “consisting of” language in claim 20 is supported by the original disclosure and points to Figure 1 and notes that accordingly applicant has demonstrated that the recited steps were those believed required to complete the invention. This argument is not persuasive. For example, in the instant disclosure, US 2004/0159073 paragraphs [0030-0031], there are additional floating steps set forth in the description of the invention that are not present in the language of claim 20. For example, paragraph [0031] suggests an additional floating step is necessarily performed after the aggregate is deposited and worked into the top surface of the concrete. Further, Figure 1 shows other additional steps in a particular embodiment of the invention and does not suggest that these steps are optional.

Applicant’s arguments regarding the prior art rejections filed October 19, 2007 have been fully considered, but they are not persuasive. Applicant argues that neither Shaw nor Danielsson teach the required limitation of grinding the upper surface of the partially cured concrete with the integrated aggregate therein. This argument is not persuasive. It is the combination of Shaw with Danielsson as set forth in the section 103 rejection above that suggests the claim limitation. Shaw teaches grinding the upper surface of cured concrete with the integrated aggregate therein. Danielsson teaches that the efficiency of grinding concrete can be increased by grinding the concrete before it is finally cured (i.e. partially cured) and is the reason for combination with Shaw. The combination suggests modifying Shaw’s method to grind the concrete with the integrated aggregated therein while it is only partially cured. Further, one can not show nonobviousness by arguing against the references individually when the rejection

is made Applicant's arguments against the teachings of the references individually does not overcome the obviousness rejection when the rejection is based on a combination of references.

Applicant further argues that Shaw does not teach removal of concrete and the aggregate material itself as required. This argument is not persuasive. As recognized by applicant, Shaw teaches that "preferably...no more than five percent of the particulates" (col. 4, lines 47-49) is removed. So, while the examiner agrees that Shaw suggests not removing too much aggregate, the claim merely states "removing some of" (claim 1, line 17). The examiner submits that less than 5 percent reads on "removing some of". So, for the sake of argument, while Shaw may arguably teach away from removing too much aggregate/particulate, the teaching of Shaw cannot reasonably be construed as teaching away from "removing some of" the aggregate/particulate.

Applicant further argues that Harvey teaches a decorative surface applied over an existing wood or concrete subfloor and that Harvey also requires additional steps as compared to Shaw thus suggesting it would not have been obvious to make the proposed combination. This argument is not persuasive. The examiner notes that the teaching of Harvey employed in the rejection is to grind a partially cured concrete floor (col. 3, lines 36-67) and that Harvey shows it was known in the art at the time of the claimed invention to grind an analogous decorative floor before the floor is fully cured. Absent a showing of new or unexpected results, it follows that changing the sequence of steps or employing an art recognized equivalent alternative method is *prima facie* obvious (MPEP 2144.06-2144.07). The examiner also notes that Danielson suggests an advantage/motivation of grinding a semi-cured concrete.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeff Wollschlager whose telephone number is 571-272-8937. The examiner can normally be reached on Monday - Thursday 7:00 - 4:45, alternating Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina Johnson can be reached on 571-272-1176. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JW

Jeff Wollschlager
Examiner
Art Unit 1791

CF
CHRISTINA JOHNSON
SUPERVISORY PATENT EXAMINER

January 7, 2008